WHAT IS CLAIMED IS:

1. A wafer configured to have alignment marks on an exposure surface, the alignment marks having edges for scattering inspection light for alignment during an exposure:

wherein the alignment mark is configured to have a plurality of dot pattern groups, each of the dot pattern groups being configured to have a plurality of dot patterns arrayed in a predetermined direction, and

the plurality of dot pattern groups are arrayed in the predetermined direction with an interval between the dot pattern groups, the interval being wider than an interval between the dot patterns.

2. The wafer according to claim 1, wherein the dot pattern is formed by performing a proximity exposure.

3. The wafer according to claim 1, wherein the dot pattern is a raised or grooved rectangular pattern.

4. The wafer according to claim 1, wherein the dot pattern formed in a plurality of rows in the predetermined direction.

5. The wafer according to claim 1, wherein the alignment marks are disposed at a plurality of portions in respective directions.

6. An exposure mask configured to have alignment marks on a surface, the alignment marks having edges for scattering inspection light for alignment:

wherein the alignment mark is configured to have a plurality of dot pattern groups, each of the dot pattern groups

being configured to have a plurality of dot patterns arrayed in a predetermined direction, and

the plurality of dot pattern groups are arrayed in the predetermined direction with an interval between the dot pattern groups, the interval being wider than an interval between the dot patterns.

7. The exposure mask according to claim 6, wherein the dot pattern formed in a plurality of rows in the predetermined direction.

8. The exposure mask according to claim 6, wherein the alignment marks are disposed at a plurality of portions in respective directions.

9. A method for detecting an alignment mark, comprising the steps of:

radiating inspection light for alignment to a surface of wafer in such a way that the inspection light is incident on an alignment mark in a surface of the wafer and scattered therein before exposure with an exposure mask,

wherein the exposure mask has alignment marks, the alignment marks being configured to have a plurality of dot pattern groups, each of the dot pattern groups being configured to have a plurality of dot patterns arrayed in a predetermined direction, and the plurality of dot pattern groups being arrayed in the predetermined direction with an interval between the dot pattern groups, the interval being wider than an interval between the dot patterns,

the alignment mark of the wafer has a same pattern as that of the dot pattern of the exposure mask.

10. The method for detecting an alignment mark according to claim 9,

wherein the inspection light for alignment is incident on the exposure mask and the wafer in an oblique direction.

11. The method for detecting an alignment mark according to claim 9,

wherein the inspection light is radiated onto the exposure surface from an oblique direction in such a way that a plane of incidence of the inspection light is parallel to the arrangement direction of the dot patterns.

12. The method for detecting an alignment mark according to claim 9, wherein the exposure is a proximity exposure.

13. The method for detecting an alignment mark according to claim 9,

wherein the detecting of scattered inspection light is performed by differentiation-processing of a signal strength along the arrangement direction of dot patterns.

14. The method for detecting an alignment mark according to claim 9,

wherein peaks of higher signal strength with stronger scattering of the inspection light are arranged periodically in the direction of arrayed dot pattern.

15. An exposure method comprising the steps of:

performing an alignment by causing scattering of inspection light for alignment at an alignment mark on a surface

of an exposure mask, and

performing an exposure of a wafer via the exposure mask,

wherein the exposure mask is configured to have alignment marks, the alignment marks being configured to have a plurality of dot pattern groups, each of the dot pattern groups being configured to have a plurality of dot patterns arrayed in a predetermined direction, and the plurality of dot pattern groups being arrayed in the predetermined direction with an interval between the dot pattern groups, the interval being wider than an interval between the dot patterns.

16. The exposure method according to claim 15,

wherein the inspection light for alignment is incident on the exposure mask and the wafer in an oblique direction.

17. The exposure method according to claim 15,

wherein the inspection light is radiated onto the exposure surface from an oblique direction in such a way that a plane of incidence of the inspection light is parallel to the arrangement direction of the dot patterns.

18. The exposure method according to claim 15, wherein the exposure is a proximity exposure.

19. The exposure method according to claim 15,

wherein the detecting of scattered inspection light is performed by differentiation-processing of a signal strength along the arrangement direction of dot patterns.

20. The exposure method according to claim 15,

wherein peaks of higher signal strength with stronger

scattering of the inspection light are arranged periodically in the direction of arrayed dot pattern.